

What is claimed is:

1. A printing apparatus configured to print on a media and minimize distortion of the media during printing, the apparatus comprising:

a printing zone for printing in a substantially horizontal orientation; and

5 a heated media deflector configured to guide and dry the media, the heated media deflector located downstream of the horizontal printing zone.

2. The apparatus of claim 1 further comprising:

a substantially vertical feeding path downstream of the heated media deflector

10 wherein the heated media deflector is a transition feeding area between the horizontal printing zone and the vertical path.

3. The apparatus of claim 2, wherein the heated media deflector comprises;

a plastic support portion; and

15 a sheet metal portion attached to the plastic support portion, the sheet metal portion configured to contact and guide the media.

4. The apparatus of claim 3, wherein the sheet metal portion slopes downwards at about 10° below the horizontal.

20 5. The apparatus of claim 4, further comprising a heating resistor heating the sheet metal to dry the media, the heating resistor being attached to a bottom face of the sheet metal portion.

25 6. The apparatus of claim 5, wherein the plastic support portion comprises a plastic extrusion for directing the media into the vertical feeding path.

7. The apparatus of claim 5, wherein the plastic support portion comprises an insulating plank preventing heat loss.

8. The apparatus of claim 7, further comprising a pair of lateral hooks on the insulated plank attaching the sheet metal portion to the plastic support portion.
9. The apparatus of claim 5, wherein the printing zone comprises a printhead  
5 arrangement printing on the media and a platen for supporting the media during printing.
10. The apparatus of claim 8 wherein the vertical feeding path includes an exit where the media exits the printing apparatus.
11. A method of reducing distortion in media during an inkjet printing process when the media travels from a substantially horizontal printing plane to a substantially vertical feeding path, the method comprising:  
printing an image on the media in the substantially horizontal printing plane;  
feeding the media in the substantially vertical feeding path after printing the  
15 image; and  
heating the media by passing it over a heated media deflector in a transition area between the substantially horizontal printing plane and the substantially vertical feeding path.
12. The method of claim 11, wherein the step of printing comprises printing water-based ink from an inkjet printhead and providing a paper-based web media.
13. The method of claim 12, wherein the step of heating the media comprises producing an amount of heat to evaporate excess water from the water-based ink.
14. A method of reducing distortion in inkjet printers, the method comprising:  
detecting environmental conditions;  
determining print mode parameters; and  
setting a heating temperature for heating the media based on the detected  
25 environmental conditions and the determined print mode parameters.
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15. The method of claim 14, wherein the step of detecting the environmental conditions includes detecting the temperature and the humidity in the printer.
16. The method of claim 15, wherein the print mode parameters include plot width, media  
5 advance rate, printhead scanning rate, and ink fired per scan.
17. The method of claim 16, wherein the heating temperature is approximately 50°C to 70°C.
- 10 18. A heated media deflector for an inkjet printer comprising:  
a plastic support portion;  
a sheet metal portion attached to the plastic portion; and  
a heating resistor attached to a bottom face of the sheet metal.
- 15 19. The heated media deflector of claim 18, wherein the sheet metal portion slopes downwards at about 10° below the horizontal.
- 20 20. The apparatus of claim 19, wherein the plastic support portion comprises a plastic extrusion for smoothly directing a media to a vertical feeding path.
21. The apparatus of claim 20, wherein the plastic support portion comprises an insulating plank for preventing heat loss.
- 25 22. The apparatus of claim 21, further comprising a pair of lateral hooks on the insulated plank for attaching the sheet metal portion to the plastic support portion.